

IN THE U.S. PATENT AND TRADEMARK OFFICE

Applicant(s): David Walter BRANSTON et al.
Int'l Application No.: PCT/DE2003/004121
Application No.: **NEW APPLICATION**
Filed: June 22, 2005
For: **METHOD AND DEVICE FOR INFLUENCING
COMBUSTION PROCESSES OF FUELS**

**INFORMATION DISCLOSURE STATEMENT
(SUBMISSION CONCURRENT WITH THE
FILING OF A NEW PATENT APPLICATION)**

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June 22, 2005

Sir:

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The patents, publications, or other information submitted for consideration by the Office are listed on PTO-1449, attached hereto.

II. COPIES

- ☐ Submitted herewith is a legible copy of (i) each U.S. and foreign patent; (ii) each publication or that portion which caused it to be listed; and (iii) all other information or that portion which caused it to be listed.
- ☒ This application is a National Phase of a PCT application. All of the documents listed on the PTO-1449 are not enclosed because they were cited in the International Search Report and copies should be forwarded from the International Search Authority. If copies are needed, please contact the undersigned.

New PCT National Phase Application
Docket No. 32860-000904/US

- ☐ Because the present application is being filed after June 30, 2003, no copies of the U.S. patents or U.S. patent application publications which are listed on the attached Form 1449 are enclosed pursuant to the waiver of 37 C.F.R. § 1.98(a)(2)(i). Any foreign patent documents or non-patent literature listed on the attached Form 1449 are enclosed herewith.

III. CONCISE EXPLANATION OF THE RELEVANCE
(check at least one box)

a. ☐ **DOCUMENTS IN THE ENGLISH LANGUAGE**

The attached patents, publications, or other information in the English language do not require a statement of relevancy.

b. ☒ **DOCUMENTS NOT IN THE ENGLISH LANGUAGE**

A concise explanation of the relevance of all patents, publications, or other information listed that is not in the English language is as follows:

Many of the documents have been discussed in the PCT Search Report, and/or throughout the specification. The PCT Search Report and German translation aid translating key terms into English, indicate the degree of relevance found by the PCT Office, thereby satisfying the requirement for a concise explanation. See MPEP 609(A)(3).

c. ☒ **ENGLISH LANGUAGE SEARCH REPORT**

An English language version of the search report or action that indicates the degree of relevance found by the foreign office is attached, thereby satisfying the requirement for a concise explanation. See MPEP 609(A)(3).

d. ☒ **OTHER**

The following additional information is provided for the Examiner's consideration.

International Search Report and German Translation Aid.

FEES

This Information Disclosure Statement is being filed concurrently with the filing of a new patent application; therefore, no fee is required.

If the Examiner has any questions concerning this IDS, he/she is requested to contact the undersigned. If it is determined that this IDS has been filed under the wrong rule, the PTO is requested to consider this IDS under the proper rule and charge the appropriate fee to Deposit Account No. 08-0750.

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Respectfully submitted,

HARNESS, DICKEY & PIERCE, P.L.C.

By: 
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Enclosures:

- ☒ Form PTO-1449(s)
- ☒ Documents
- ☒ Foreign Search Reports

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Application Number

New Application

Filing Date

June 22, 2005

First Named Inventor

Unknown

Art Unit

Unknown

Examiner Name

David Walter BRANSTON et al.

Attorney Docket Number

32860-00904/US

U.S. PATENT DOCUMENTS

| Examiner Initials * | Cite No. ¹ | Document Number | Publication Date MM-DD-YYYY | Name of Patentee or Applicant of Cited Document | Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear |
|------------------------|--------------------------|--|--------------------------------|--|---|
| | | Number - Kind Code ² (if known) | | | |
| | 1 | US- 3 416 870 A | 17-12-1968 | Esso Research and Engineering Company | |
| | 2 | US- 4 111 636 | 05-09-1978 | L.P.Weinberger | |
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FOREIGN PATENT DOCUMENTS

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| | | Country Code ³ - Number ⁴ - Kind Code ⁵ (if known) | | | | |
| | 3 | GB 10 13 015 A ✓ | 15-12- 1965 | Axel Bertilsson Kjellstrom | | |
| | 4 | EP 0 212 379 B1 ✓ | 04-03- 1987 | Keesmann Till | | |
| | 5 | WO 03/081130 A | 02-10- 2003 | Pyroplasma KG | | |
| | 6 | CH 568 250 A ✓ | 31-10- 1975 | B.P.Nikolsky, M.M.Shults, A.M.Pisarevsky, A.A.Beljustin, S.K.Bolkhontseva, V.A.Dolidze, V.M.Tarasova, J.M.Karachentseva, L.I.Dolmazova | | |
| | 7 | EP 1 178 206 A ✓ | 0-602- 2002 | Koyama, Motonari | | |
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Considered

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| Filing Date | June 22, 2005 |
| First Named Inventor | David Walter BRANSTON et al. |
| Group Art Unit | Unknown |
| Examiner Name | Unknown |
| Attorney Docket Number | 32860-000904/US |

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS

| Examiner Initials * | Cite No. ¹ | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published. | T ² |
|------------------------|--------------------------|---|----------------|
| | 9 | H. F. Calcote, R. N. Pease, „Electrical properties of flames. Burner flames in longitudinal electric fields," <i>Industrial and Engineering Chemistry</i> 43 (1951) 2726-2731 | |
| | 10 | H. F. Calcote, C. H. Berman, „Increased methane-air stability limits by a DC electric field," <i>Fossil fuels combustion symposium, 12th Annual energy-sources technology conf.</i> (1989) pp. 25-31 | |
| | 11 | R. I. Noorani, R. E. Holmes, „Effects of electric fields on the blowoff limits of a methane-air flame," <i>AIAA Journal</i> 23 (1985) 1452-1454 | |
| | 12 | M. Kono, F.B. Carleton, A.R. Jones, F.J. Weinberg, „The effect of nonsteady electric fields on the sooting flames," <i>Combust. Flame</i> 78 (1989) 357-64 | |
| | 13 | M. Saito, T. Arai, M. Arai, „Control of soot emitted from acetylene diffusion flames by applying an electric field," <i>Combust. Flame</i> 119 (1999) 356-366 | |
| | 14 | C.H. Berman, R.J. Gill, H.F. Calcote, „Nox reduction in flames stabilized by an electric field," PD-vol. 33, <i>Fossil Fuel Combustion</i> , ASME 1991, pp. 71-75 | |
| | 15 | A.B. Vatazhin, V.A. Likhter, V.A. Sepp, V.I. Shul'gin, „Effect of an electric field on the nitrogen oxide emission and structure of a laminar propane diffusion flame," <i>Fluid Dynamics</i> 30 (1995) 166-174 | |
| | 16 | D. Bradley, S.H. Nasser, „Electrical coronas and burner flame stability," <i>Combust. Flame</i> 55 (1984) 53-58 | |
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